

Abstract

An automotive device for increasing the traction on a supporting surface comprising a body mountable on a wheel hub and carrying a plurality of radially extending traction arms that are mounted for movement between retracted positions and extended positions in which the outer ends of the arms lie over the tread of the vehicle. Several different embodiments are shown, including L-shaped flexible plastic arms with enlarged outer ends having bumps and openings for increased traction, arcuately curved arms of substantially uniform width, elongated spring coils supported in nozzles for directing the outer ends into extended positions, either across the tread or in a V-shaped configuration over the tread, and others. Automatic actuators include rotary motors driving pinion gears meshing with racks on the traction arms, linear actuators for the spring coils, and others. One embodiment has a special wheel rim mountable on a wheel hub and carrying all of the components of the device, including means for supporting and guiding the traction elements. Automatic remote controls, a heater, battery packs and a generator also are disclosed.